

PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

Lecture Plan

Faculty Name: -Sidharth Gandhi

Subject Name: - MVT

Branch/Semester: - ME - 5th SEM

Subject Code:-MEC-305A

Lecture No.	Topic to be covered	Planned Date	ICT Tool Used
1st	Introduction to Subject	06-09-2021	
2nd	UNIT-1 Elements of a vibratory system	07-09-2021	
3rd	S.H.M, Degrees of freedom, Types of vibrations	08-09-2021	
4th	Work done by a harmonic force	13-09-2021	
5th	Beats Phenomenon	14-09-2021	
6th	Natural frequency by equilibrium and energy methods	20-09-2021	
7th	Equivalent spring, linear and torsional systems	21-09-2021	
8th	Compound pendulum	22-09-2021	
9th	Bifilar and Trifilar suspensions	27-09-2021	
10th	Different types of damping	28-09-2021	
11th	Differential equations of damped free vibrations	29-09-2021	
12th	Initial conditions, logarithmic decrement	04-10-2021	
13th	Vibrational energy and logarithmic decrement	05-10-2021	
14th	UNIT-2 Sources of excitation	06-10-2021	
15th	Equations of motion with harmonic force	11-10-2021	
16th	Response of rotating and reciprocating unbalanced system	12-10-2021	
17th	Support motion	13-10-2021	
18th	Vibration Isolation	18-10-2021	
19th	Force and Motion transmissibility	19-10-2021	
20th	Forced vibrations with coloumb damping	20-10-2021	
21st	Forced vibrations with structural damping	27-10-2021	
22nd	Forced vibrations with viscous dampings	02-11-2021	
23rd	UNIT-3 Multi-degree of freedom systems	08-11-2021	NPTEL
24th	Principle modes of vibrations	09-11-2021	NPTEL
25th	Influence co-efficient	23-11-2021	NPTEL
26th	Matrix method	24-11-2021	NPTEL
27th	Orthogonality principle	29-11-2021	NPTEL
28th	Dunkerleys equation	30-11-2021	NPTEL
29th	Matrix iteration method	01-12-2021	NPTEL
30th	Holzer Method	06-12-2021	NPTEL
31st	Rayleigh Method	07-12-2021	NPTEL

32nd	Rayleigh-Ritz methods	08-12-2021	NPTEL
33rd	Stodolamethod,Hamilton principle	20-12-2021	NPTEL
34th	Transverse vibrations of strings,Longitudinal Vibrations of bars	21-12-2021	NPTEL
35th	Lateral vibration of beams,Torsional vibration of circular shafts	22-12-2021	NPTEL
36th	Unit- 4 Tribology in design, Tribology in industry,Lubrication: Basic modes of lubrication	12-12-2021	PPT
37th	Lubricants, Properties of lubricants,Recycling of used oils and oil conservation	13-12-2021	PPT
38th	Laws of friction, kinds of friction, causes of friction	27-12-2021	PPT
39th	Theories of friction, Effect of surface preparation	28-12-2021	PPT
40th	Wear between solids and liquids,Theories of wear	29-12-2021	PPT

Signature